

Work Order ID 158995

Tuesday, April 04, 2017 2:38:12 PM

158995

Page 1

Item ID: D412-630-031**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear**Start Date:** 4/6/2017 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 4/15/2017 **Req'd Qty:** 1.00***1*****Customer:****Reference:** SCHEDULED

APR 04 2017

Approvals:**Process Plan:****Date:** APR 04 2017**Tooling:****Date:****Run Start *NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3462	REV C								
IIN D412-630	Rev O								

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy D412-630 bluefile & type labels per PPP412-630-031 CHG004

DAS
28
9-89

MAY 23 2017

110

Small Fab

0.00

110

Small Fab

Memo

0.19

Small Fab

Assemble as per IIN D412-630

ensure tension to retract step is 11 to 18 lbs before installing lockwire.

IX 17/05/18 DAS 36 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
2-20 85 33-8				2-20 85 33-8				Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Work Order ID 158995

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Item ID: D412-630-031

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 4/15/2017 Req'd Qty: 1.00

1

Customer:

Reference: SCHEDULED

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC5- Inspect part completeness to step on W/O	0.00				1			DAS 38 9-89
120									
QC	Memo	0.02							
Quality Control	****ensure tension to retract step is 11 to 18 lbs **** ENSURE STEP IS A LH: _____								MAY 18 2017
130	Pick Kit	0.00				1			DAS 6 9-89
130									
Packaging	Memo	0.00							APR 07 2017 DAS 27 9-89
Packaging									
140	QC4- 100% Inspect kits for completeness	0.00							DAS 28 9-89
140									
QC	Memo	0.03							MAY 23 2017
Quality Control	VERIFY ORIENTATION OF D3462/D3463: _____								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

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Item ID: D412-630-031**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear**Start Date:** 4/6/2017 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 4/15/2017 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:** SCHEDULED**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start*****NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop*****NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Packaging	0.00							
150									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-630-031 ENSURE STEP IS A LH: _____ Location: FG034								
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.10							
Quality Control									

DAS
28
9-89

MAY 23 2017

17/5/23

MAY 23 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
☐ Environment	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
☐ Design	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
☐ Doc/Data	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
☐ Equip/Tooling	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
☐ Handling/Pre	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
☐ Material	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
☐ Internal Transport	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
☐ Tribal Knowledge	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
☐ LOA	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
☐ Substation	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
☐ Past Expiry Date	☐ Manufacturing Process	OTHER : _____					
☐ Misidentified	☐ Past Due						

Picklist Print

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Work Order ID: 158995

158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV. A 05.11.21 NEW ISSUE EC
IPP REV. B 05.12.19 updated pick list EC
IPP REV. C 07.11.12 ecn 1019, no chg EC verified by DD IPP REV: D
16.06.23 AS PER IIN REV.O DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN310-4 *AN310-4* Nut		Purchased	No			110	Each	78.0000	1	1			
Location Loc Qty Loc Code													
GA 25													
M127815 25													
ST331 53													
M136648 13													
M137075 40													
AN310-7 *AN310-7* Nut		Purchased	No			110	Each	15.0000	1	1			
Location Loc Qty Loc Code													
ST331 15													
m120124 15													
AN4C14 *AN4C14* Bolt		Purchased	No			110	Each	5.0000	1	1			
Location Loc Qty Loc Code													
ST344 5													
m135704 5													

DAS
6
9-89

APR 07 2017

DAS
6
9-89

APR 07 2017

DAS
6
9-89

APR 07 2017

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WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 158995

158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

AN4CH3	Purchased	No	110	Each	18.0000	2	2
--------	-----------	----	-----	------	---------	---	---

AN4CH3

Bolt

DAS
6
9-89

APR 07 2017

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST346	18	
M135665	18	

2

D3443-041	Manufactured	No	110	Each	0.0000	1	1
-----------	--------------	----	-----	------	--------	---	---

D3443-041

Strut Weldment Assembly

DAS
36
9-89

17/05/17

D3443-043	Manufactured	No	110	Each	0.0000	1	1
-----------	--------------	----	-----	------	--------	---	---

D3443-043

Strut Weldment Assembly

DAS
36
9-89

17/05/17

D3443-9	Manufactured	No	110	Each	16.0000	2	2
---------	--------------	----	-----	------	---------	---	---

D3443-9

Pin

DAS
6
9-89

APR 07 2017

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST035	16	
149322	16	

2

D3454-7	Manufactured	No	110	Each	30.0000	2	2
---------	--------------	----	-----	------	---------	---	---

D3454-7

Bushing

DAS
6
9-89

APR 07 2017

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST036	30	
149466	30	

2

D3455-1	Manufactured	No	110	Each	83.0000	2	2
---------	--------------	----	-----	------	---------	---	---

D3455-1

Spacer

DAS
6
9-89

APR 07 2017

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
-----------------	----------------	-----------------

ST036	83	
149364	83	

2

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Shop Packet Print

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : _____									

Picklist Print

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Work Order ID: 158995

158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

D3463-041 Manufactured No

110 Each 3.0000 1 1

D3463-041

Step Weldment Assembly

Location

Loc Qty

Loc Code

ST386

3

131773

3

D3465-1 Manufactured No

110 Each 49.0000 1 1

D3465-1

Washer

Location

Loc Qty

Loc Code

ST037

49

149356

49

MS24665-227 Purchased No

110 Each 84.0000 1 1

MS24665-227

Cotter Pin

Location

Loc Qty

Loc Code

GA

16

111041

16

ST289

68

m135671

68

MS24665-302 Purchased No

110 Each 70.0000 1 1

MS24665-302

Cotter Pin

Location

Loc Qty

Loc Code

ST288

70

m135672

70

DAS
6
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DAS
6
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APR 07 2017

DAS
6
9-89

APR 07 2017

DAS
6
9-89

APR 07 2017

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WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

AN310-4

Purchased

No

130

Each

78.0000

1

1

AN310-4

Nut

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

25

M127815

25

ST331

53

M136648

13

M137075

40

AN310-5

Purchased

No

130

Each

25.0000

2

2

AN310-5

Nut

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST331

25

m135672

25

AN3C5A

Purchased

No

130

Each

727.0000

3

3

AN3C5A

Bolt

**

DAS
6
9-89

APR 07 2017

Location

Loc Qty

Loc Code

FG

5

122800

5

FP001

60

M137075

60

OVER002

500

M136182

100

M136450

200

M136579

100

M137164

100

ST350

162

M134676

1

M135442

161

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Tuesday, April 04, 2017 2:38:11 PM

Work Order ID: 158995

158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

D3454-1

Manufactured No

130

Each

13.0000

1

1

D3454-1

Bushing

DAS
28
9-89

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST036

13

149447

3

156302

10

D3454-3

Manufactured No

130

Each

21.0000

2

2

D3454-3

Bushing

DAS
28
9-89

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST036

21

149416

21

D3454-5

Manufactured No

130

Each

13.0000

2

2

D3454-5

Bushing

DAS
28
9-89

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST036

13

149326

13

D3455-1

Manufactured No

130

Each

83.0000

4

4

D3455-1

Spacer

DAS
28
9-89

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST036

83

149364

83

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

Page 7

Tuesday, April 04, 2017 2:38:11 PM

Work Order ID: 158995

158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

D3455-3

Manufactured No

130 Each

23.0000

2 2

D3455-3
Spacer

DAS
28
9-89

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST036

23

149459

23

D3462-041

Manufactured No

130 Each

2.0000

1 1

D3462-041
Bracket

DAS
28
9-89

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST036

2

144281

0

146509

2

D3672-5

Manufactured No

130 Each

676.0000

1 1

D3672-5
Washer, Phenolic

DAS
28
9-89

**

DAS
6
9-89

APR 07 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

8

44679

8

ST047

168

50354

168

ST051A

500

153354

500

Tuesday, April 04, 2017 2:38:11 PM

Shop Packet Print

Page 7

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Page 8

Tuesday, April 04, 2017 2:38:11 PM

Work Order ID: 158995

158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

MS21043-3

Purchased

No

130

Each

872.0000

3

3

MS21043-3

Nut

DAS
6
9-89

APR 07 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

80

103691

80

FP001

203

m130673

11

m136182

192

GA

215

m133990

27

m136182

188

ST302

305

m136986

305

ST304

69

m131340

69

3

MS24665-227

Purchased

No

130

Each

84.0000

2

2

MS24665-227

Cotter Pin

DAS
6
9-89

APR 07 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

16

111041

16

ST289

68

m135671

68

2

Tuesday, April 04, 2017 2:38:11 PM

Shop Packet Print

Page 8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : _____									

Picklist Print

Tuesday, April 04, 2017 2:38:11 PM

Work Order ID: 158995

158995

Parent Item: D412-630-031

D412-630-031

Parent Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017

Required Date: 4/15/2017

Start Qty: 1.00

Required Qty: 1.00

MS24665-229

Purchased

No

130

Each

183.0000

2

2

MS24665-229

Cotter Pin

DAS
28
9-89

**

DAS
6 APR 07 2017
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

2

118234

2

ST289

181

m135671

181

130

Each

362.0000

7

7

NAS1149C0363R

Purchased

No

NAS1149C0363R

Washer

DAS
28
9-89

**

DAS
6 APR 07 2017
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

100

m133077

100

GA

46

m133077

46

ST260a

200

m136983

200

ST266

16

m133077

16

130

Each

211.0000

1

1

NAS1149C0563R

Purchased

No

NAS1149C0563R

Washer

DAS
28
9-89

**

DAS
6 APR 07 2017
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST265

211

m131697

211

DQA: _____ Date: _____



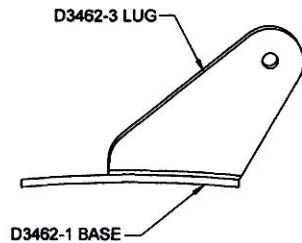
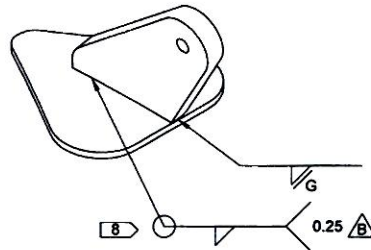
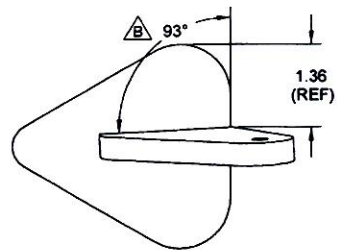
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

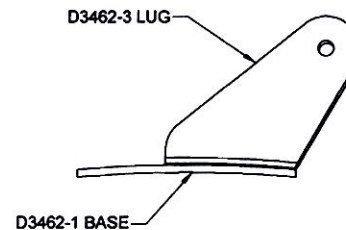
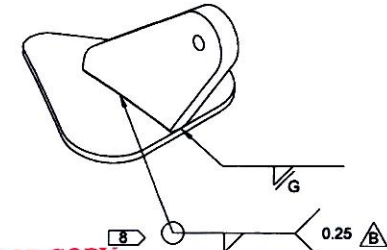
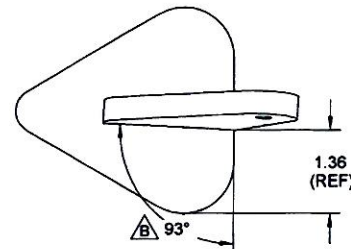
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						



D3462-041 BRACKET ASSEMBLY



D3462-042 BRACKET ASSEMBLY

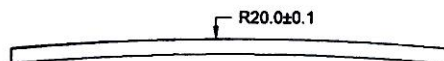
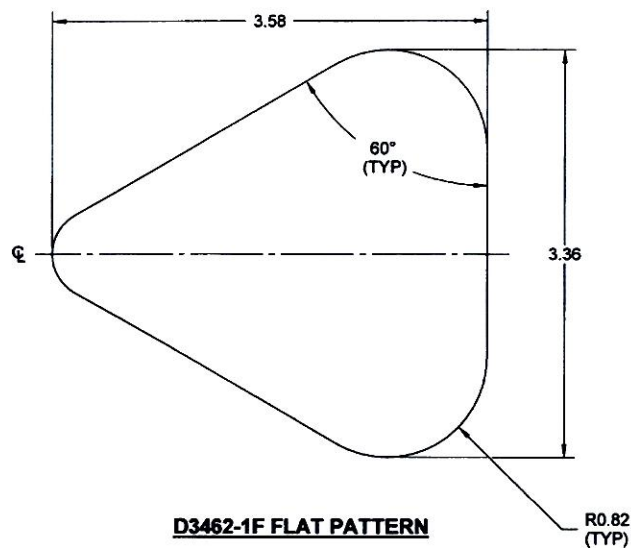
QTY -041	QTY -042	P/N	DESCRIPTION
X		D3462-041	BRACKET ASSEMBLY
	X	D3462-042	BRACKET ASSEMBLY
1	1	D3462-1	BASE
1	1	D3462-3	LUG

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3462-041" OR "D3462-042" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.75 lbs (TYP)
 - 8) WELDING: PER DART QSI 004

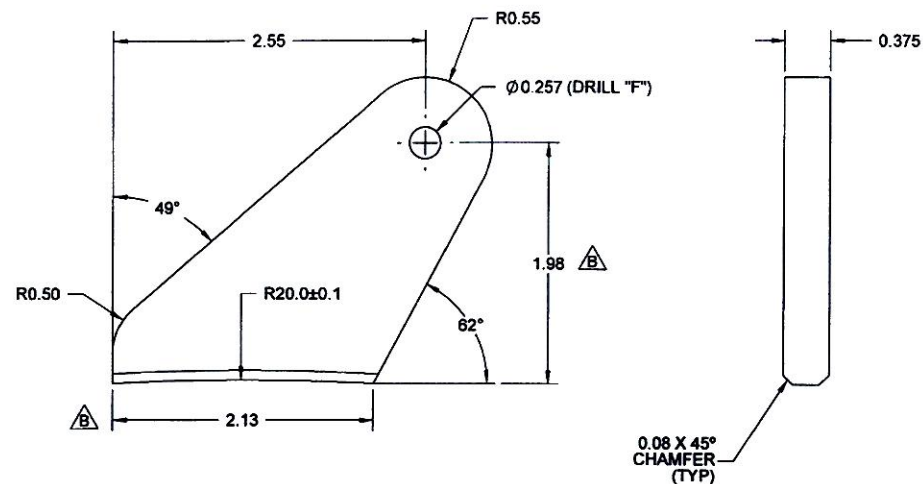
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 158995
170404

FILED
050701/120

C	SHOW VIEWS OF D3462-041 & D3462-042, UPDATE DWG	DC	07.10.24
B	REASON: PRODUCTION FACILITY	RF	05.12.05
A	REVISE DIMENSIONS	RF	05.09.20
A	NEW ISSUE	BY	DATE
REV.	DESCRIPTION		
DESIGN	IF	DART AEROSPACE LTD	
DRAWN	W.P. DC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. C
MFG. APPR.	AP	D3462	SHEET 1 OF 2
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BRACKET ASSEMBLY	1:2
DATE	07.10.24	COPYRIGHT © 2006 BY DART AEROSPACE LTD	
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- NOTES:**
- 1) MATERIAL: AISI 304 SS SHEET, 0.125 THICK
PER MIL-S-5019 (ANNEALED), 2B FINISH
(REF. DART SPEC. M304S11GA)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.28 lbs



- NOTES:**
- 1) MATERIAL: AISI 304 SS BAR
(REF. DART SPEC M304B0.375X03.000)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.47 lbs

RELEASED
8-07-07

DESIGN	FF	DART AEROSPACE LTD	
DRAWN	W.D. 7.10.24	HAWKESBURY, ONTARIO, CANADA	
CHECKED	W.D.	DRAWING NO.	REV. C
MFG. APPR.	W.D.	D3462	SHEET 2 OF 2
APPROVED	W.D.	TITLE	SCALE
DE APPR.	W.D.	BRACKET ASSEMBLY	1:1
DATE	07.10.24	COPYRIGHT © 2005 BY DART AEROSPACE LTD	
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Work Order ID 158995

158995

Page 1

Tuesday, April 04, 2017 2:38:12 PM

Item ID: D412-630-031 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Start Date: 4/6/2017 Start Qty: 1.00 *1* Cust Item ID:
 Required Date: 4/15/2017 Req'd Qty: 1.00 *1* Customer:
 Reference: SCHEDULED APR 04 2017

Approvals: Process Plan: _____ Date: APR 04 2017 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3462	REV C								
IIN D412-630	Rev O								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy D412-630 bluefile & type labels per PPP412-630-031 CHG004								
110	Small Fab	0.00							
110									
Small Fab	Memo	0.19							
Small Fab	Assemble as per IIN D412-630								
	****ensure tension to retract step is 11 to 18 lbs before installing lockwire.****								

DAS
21
9-89

APR 05 2017

Work Order ID 158995

Tuesday, April 04, 2017 2:38:12 PM

158995

Accept

N900040100

Setup Start *NS1*
Stop *NS2*

Item ID: D412-630-031

Revision ID:

Item Name: Pilot/Co-Pilot Folding Step LH - Low, High & Float Gear

Cust Item ID:

Customer:

Start Date: 4/6/2017 Start Qty: 1.00

Required Date: 4/15/2017 Req'd Qty: 1.00

Reference: SCHEDULED

Run Start *NR1*
Stop *NR2*

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID Tool # Plan Code Accept Qty Reject Qty Reject Number Insp. Stamp

Draw Nbr

Revision Nbr

APR 04 2017

D3462

REV C

IIN D412-630

Rev O

0.00

100

Document Control
DOCUMENT CONTROL

0.00

100

DC

Doc.Control -USB or Paperwork

Memo

Photocopy D412-630 bluefile & type labels per PPP412-630-031 CHIG004

0.00

110

Small Fab

0.19

110

Small Fab

Small Fab

Memo

Assemble as per IIN D412-630

****ensure tension to retract step is 11 to 18 lbs before installing lockwire.****

Qty -031	Qty -032	Part Number	Description
X		D412-630-031	PILOT/CO-PILOT STEP, LH (FOLDING)
	X	D412-630-032	PILOT/CO-PILOT STEP, RH (FOLDING)
1	1	D3443-041	STRUT ASSEMBLY
1	1	D3443-043	STRUT ASSEMBLY
2	2	D3443-9	PIN
1	1	D3454-1	BUSHING
2	2	D3454-3	BUSHING
2	2	D3454-5	BUSHING
2	2	D3454-7	BUSHING
6	6	D3455-1	SPACER
2	2	D3455-3	SPACER
1		D3462-041	BRACKET ASSEMBLY
	1	D3462-042	BRACKET ASSEMBLY
1		D3463-041	STEP ASSEMBLY
	1	D3463-042	STEP ASSEMBLY
1	1	D3465-1	WASHER
1	1	D3672-5	WASHER (OR NAS1515H5)
2	2	AN310-4	NUT
2	2	AN310-5	NUT
1	1	AN310-7	NUT
2	2	AN3C5A	BOLT
1	1	AN3C6A	BOLT
1	1	AN44-C12	* EYEBOLT
1	1	AN4C14	BOLT
1	1	AN4C15	BOLT
2	2	AN4CH3	BOLT
1	1	AN5C11	BOLT
1	1	AN5C15	BOLT
7	7	NAS1149C0363R	WASHER (OR AN960C10)
1	1	NAS1149C0563R	WASHER (OR AN960C516)
3	3	MS21043-3	NUT
2	2	MS24665-227	COTTER PIN
2	2	MS24665-229	COTTER PIN
1	1	MS24665-302	COTTER PIN

* USE AN44-C12 EYEBOLT WHEN D412-630-031/-032 IS INSTALLED IN CONJUNCTION WITH D412-630-023/-024/-033/-034™ HELI-ACCESS-STEP.
SEE FIGURE 13B (D412-630-023/-024 KITS) OR FIGURE 16B (D412-630-033/-034 KITS).